

CLAIMS

What is claimed is:

1. A method of feeding an animal comprising feeding the animal a *Lactobacillus* strain that has a Profile I based on *Apa* I, *Not* I and *Xba* I digests, as shown in Figure 1 and Table 6.
2. A method of claim 1, wherein the feeding of the *Lactobacillus* strain decreases levels of at least one of coliforms and *E. coli* within the gastrointestinal tract of an animal.
3. The method of claim 1, wherein the strain fed comprises at least one of a *L. brevis* strain, a *L. fermentum* strain, and a *L. murinus* strain.
4. The method of claim 1, wherein the strain fed comprises *L. brevis* strain 1E-1.
5. The method of claim 1, wherein the *Lactobacillus* strain is isolated from a pig.
6. The method of claim 1, wherein the *Lactobacillus* strain is isolated from a pars oesophagea of a pig.
7. The method of claim 1, wherein the animal fed is a pig.

8. The method of claim 7, wherein the *Lactobacillus* strain is fed to the pig prior to weaning.
9. The method of claim 7, wherein the *Lactobacillus* strain is fed to the pig during weaning.
10. The method of claim 7, wherein the *Lactobacillus* strain is fed to the pig after weaning.
11. The method of claim 1, wherein the animal is fed the *Lactobacillus* strain such that the amount of Lactobacillus strain delivered to the animal is about 1×10^8 CFU to about 1×10^{10} CFU per day.
12. The method of claim 11, wherein the animal is fed the *Lactobacillus* strain such that the amount of Lactobacillus strain delivered to the animal is about 5×10^9 CFU per day.
13. The method of claim 1, wherein the feeding of the *Lactobacillus* strain increases performance of the animal.

14. The method of claim 13, wherein the increase in performance comprises an increase in average daily gain.
15. The method of claim 1, wherein the feeding of the *Lactobacillus* strain improves intestinal morphology.
16. The method of claim 15, wherein the improvement in intestinal morphology comprises an increase in the villus:crypt ratio in the animal.
17. The method of claim 15, wherein improvement in intestinal morphology comprises a decrease in the number of sulfuric goblet cells.
18. The method of claim 1, wherein the feeding of the *Lactobacillus* strain increases a gain:feed ratio in the animal fed the *Lactobacillus* strain.
19. A direct-fed microbial comprising:
 - (a) at least one *Lactobacillus* strain that has a Profile I based on *Apa* I, *Not* I and *Xba* I digests, as shown in Figure 1 and Table 6; and
 - (b) a carrier.

20. The direct-fed microbial of claim 19, wherein the *Lactobacillus* strain decreases levels of at least one of coliforms and *E. coli* within the gastrointestinal tract of an animal.
21. The direct-fed microbial of claim 19, wherein the strain comprises at least one of a *L. brevis* strain, a *L. fermentum* strain, and a *L. murinus* strain.
22. The direct-fed microbial of claim 19, wherein the strain comprises *L. brevis* strain 1E-1.
23. The direct-fed microbial of claim 19, wherein the *Lactobacillus* strain is isolated from a pig.
24. The direct-fed microbial of claim 19, wherein the *Lactobacillus* strain is isolated from a pars oesophagea of a pig.
25. The direct-fed microbial of claim 19, wherein the carrier comprises a liquid carrier.
26. The direct-fed microbial of claim 25, wherein the liquid carrier comprises a milk replacer.

27. The direct-fed microbial of claim 25, wherein the liquid carrier comprises water.
28. The direct-fed microbial of claim 19, wherein the direct-fed microbial is in the form of gel paste or a drench.
29. The direct-fed microbial of claim 19, wherein the carrier comprises a gruel feed.
30. An isolated *Lactobacillus* strain that has a Profile I based on *Apa* I, *Not* I and *Xba* I digests, as shown in Figure 1 and Table 6.
31. The *Lactobacillus* strain of claim 30, wherein the strain comprises at least one of a *L. brevis* strain, a *L. fermentum* strain, and a *L. murinus* strain.
32. The *Lactobacillus* strain of claim 30, wherein the strain decreases levels of at least one of coliforms and *E. coli* within the gastrointestinal tract of an animal.
33. The *Lactobacillus* strain of claim 30, wherein the strain is *L. brevis* strain 1E-1.
34. The *Lactobacillus* strain of claim 30, wherein the strain is isolated from a pig.
35. The *Lactobacillus* strain of claim 30, wherein the strain is isolated from a pars oesophagea of a pig.

36. A method of forming a direct fed microbial, the method comprising:

(a) growing, in a liquid nutrient broth, a culture including at least one *Lactobacillus* strain has a Profile I based on *Apa* I, *Not* I and *Xba* I digests, as shown in Figure 1 and Table 6; and

(b) separating the strain from the liquid nutrient broth.

37. The method of claim 36, wherein the *Lactobacillus* strain comprises *L. brevis* strain 1E-1.

38. The method of claim 36, further comprising freeze-drying the strain to form the direct-fed microbial.

39. The method of claim 38, further comprising adding the freeze-dried strain to a carrier.